

FY 2014 Secretary of Defense Environmental Awards

USAG Fort Riley Natural Resource Team

Natural Resources Conservation, Team



Introduction and Background

Among the standing prairie grasses and recently burned prairie, the remarkable ritual of the Greater Prairie Chicken takes place each spring. This sentinel of the Tallgrass Prairie proudly displays the fighting spirit of the Army's 1st Infantry Division, the "Big Red One", on Fort Riley's 101,733 acres situated on the northern edge of the world renowned Flint Hills. With less than 3% of the world's tallgrass prairie intact, the entire suite of grassland flora and fauna requires a delicate balance of fire, use and rest to sustain the integrity of the ecosystem. The stewardship responsibility of Fort Riley's Natural Resources Conservation Team intimately weaves the need to train our Soldiers with meeting the Army's sustainability goals. With the average prairie chicken flock requiring more than 2,000 acres to meet its minimum habitat requirements, the Fort Riley Team has employed an unparalleled regional influence to maximize success. Fort Riley's Natural Resources Conservation Team of 18 professionals is well recognized by installation, regional and national stakeholders as a successful leader in natural resources stewardship, ingenuity and uncompromising Midwestern spirit.

JUDGING CRITERIA



Program Management



Orientation to Mission



Technical Merit



Transferability



Stakeholder Interaction



Program Impact

Accomplishments

Land Use management - Fort Riley’s most critical natural resources management tool is the successful execution of its annual prescribed burn plan. Over the last ten years, increased military training, noxious weed considerations and endangered species management had made the execution of



those plans increasingly difficult. Utilizing Geographical Information Systems, personnel actions and the best available scientific data,

the Fort Riley Team successfully transformed the Wildland Fire Program by realigning our burn units and embedding our Wildland Fire Coordinator into the installation’s Fire Department. The result is increased acreage prescriptively burned (from 23,384 in 2012 to 26,890 in 2013) coupled with a reduction in the number of days required to execute the plans from 31 in 2012 to 19 in 2013 thereby, improving management of the land while concomitantly reducing the burden of that critical management need on military training schedules.



Fish and Wildlife- Installation biologists acted upon a unique opportunity to protect and repurpose an underground historic rifle range bun-



ker by installing bat friendly structures in addition to the 75 separate bat houses constructed by local Boy Scouts and volunteers. The Fort Riley Team has partnered in the further refinement of software for the AnaBats program and advised improvements in technology so that it would be more user friendly for other DoD and non-DoD users. The Team also developed and implemented the Fort Riley Bat Conservation and Monitoring Guidance due to the emergence of White Nosed Syndrome elsewhere in the Midwest.



Overall Conservation Management - Recognizing the need to partner with adjacent private landowners, the Fort Riley Team employed the USFWS’s Partners for Wildlife Program to create a tri-partite agreement to improve adjacent private lands. This collaboration has led to three private lands partnership agreements to control invasive eastern redcedar on neighboring private property that effectively expands the availability of high quality habitat on Fort Riley’s border.



Education - Collaborating with the Fort Riley Outdoorsmen Group (FROG), the Fort Riley Team provided youth turkey and deer hunts for dependants of deployed Soldiers. This program has gained national acclaim from NGOs such as the National Wild Turkey Federation, Pheasants Forever and the Rocky Mountain Elk Foundation. Additionally, the Fort Riley Team and its allies sponsor two annual Hunter Education Classes, Wounded Warrior hunts, a youth fishing derby, static and 3-D archery ranges and a novice hunter mentoring program that are all paid for through donations.



Overall Conservation Management - The Fort Riley Team continues to be a leader on numerous fronts in the protection of rare species. Its efforts in prescribed burning, reducing woody encroachment and controlling invasive weeds resulted in the Kansas Biological Survey assessment that 78.7% of Fort Riley's prairies were assigned a Floristic Quality Index of A-grade or B-grade, a significant increase from 33.6% 10 years prior. The 2013 KBS Report stated: "*Comparing prairies*



surveyed 10 years prior, 74 received the same overall grade ; 31 prairies received a higher grade ; Only three prairies received a lower grade. The increase in overall grades is a function of the large number of prairies receiving higher condition grades – not changes in landscape context or prairie sizes. The reason for the increase in number of prairies with higher condition grades is not clear, but it most likely reflects actual improvement in floristic quality across the installation resulting from management strategies”.

Additionally, these increases in the health of Fort Riley's prairie led to the removal of both pale goosefoot (*Chenopodium pallescens*) and prairie dropseed (*Sporobolus heterolepis*) from Kansas's list of state-rare species based on the Fort Riley Vegetation Planning Level Survey .

Forest Management - The Fort Riley Team implemented an innovative approach to create upland game bird habitat at no cost through small dollar timber sales of Osage-orange trees for fence posts while concomitantly providing revenue for forest management. This rejuvenation process provides immediate habitat improvement



while promoting future sustainable harvest of a unique forest resource.

Compliance - The U.S. Fish and Wildlife Service and the Fort Riley Team partnered to install a water diversion structure to divert waste products from an off-post cattle holding facility. The project successfully established a grass buffer through the installation's Agricultural Outlease program to improve water quality for the endangered Topeka shiner.



Invasive Species - Discovery of an unexpected stand of Kudzu led to the development and successful execution of a plan that eliminated 100% of that population. Despite no staff experience with the plant, the Fort Riley Team utilized information from other DoD Installations and Kansas State University in the successful eradication of this invasive species.



Overall Conservation Management - The Fort Riley Team was well prepared for the fiscal constraints experienced over the last two years. Its skilled and highly motivated in-house staff effectively applied a validated budget that is less than half the budget level of the top 12 IMCOM installations, but sufficient to maintain the most critical conservation programs and projects at an appropriate level.



Other Natural Resources - Striking a balance between the need to protect resources and providing Soldiers, their families and installation visitors the opportunity for recreational off-road travel, Fort Riley's Natural Resources managers collaborated with Emergency Services and Garrison Safety Office to develop a plan allowing "trail riding" on nearly 40 miles of strategically designated trails rather than uncontrolled off-roading. This initiative has successfully met customer needs with minimal risk of damage to the terrain. Importantly, the frequent traffic on the approved trails also provides a no cost tool to maintain them as firebreaks within the installation's training areas. Off-road travel remains illegal on Fort Riley and punishable by fine.



Overall Conservation Management - The increases in rare plant numbers and improved condition of native prairie reported by the Kansas Biological Survey were achieved at a time when Fort Riley’s soldier population went from 10,000 to 19,000 with a concurrent need to increase military training exercises. The management actions were accomplished without imposing any restrictions or limitations on the military training mission.



Education - Recognizing a void in the conservation education of NCOs prior to maneuver training, the Fort Riley Team partnered with the DPTMS to develop a “*Training Ranges Environmental Protection*” course. This training has already produced dividends by reducing the frequency of training damage to sensitive areas. The course is taught to 10-50 NCOs each week.



Compliance - Prompted by two consecutive damaging flood events in the city of Manhattan, the Wildcat Creek Work Group was formed to develop a long term flood mitigation plan for the watershed. As the largest landowner at more than 30% of the total watershed acreage and having numerous military families in harm’s way, the Fort Riley Team played a critical role over a two year period in the creation and acceptance of the Flood Mitigation Plan and installation of an early warning system for which USAG Fort Riley contributed funding.



Other Natural Resources - The Fort Riley Team was granted the National Environmental Education Foundation award through the National Public Lands Day in 2012 and 2013.

The awards provided \$4,500 to enhance the Kaw River Nature Trail and establishment of a birding station at the Custer Hill Golf Course. Both enhance-



ments provide easy access to wildlife viewing in a variety of habitat types including prairie, wetland, and woodlands.

Fish and Wildlife - Fort Riley’s hunting and fishing program continued on the cutting edge of effectiveness— being the first installation to incorporate the sale of electronic permits and



pioneering the Army’s first fully functional iSportman program. These simplified, cost saving measures have contributed to a substantial increase in recreational use on the installation. The 2012 and 2013 seasons saw consecutive records for the overall number of hunting trips taken at 10,161 and 13,007, respectively, compared to an average of 5,989 during the previous 10 years. Participation is fully in compliance with DoDI 4715.03, allowing impartial and equitable participation to all users.



Other Natural Resources - The Fort Riley Team was successful in acquiring \$84,000 in supplemental funding and equipment for the program from 2012-2013 from Pheasants Forever, the National Wild Turkey Federation, Ducks Unlimited, the Rocky Mountain Elk Foundation, Remington, Eagle Claw and Quail Forever. This additional funding was used primarily to enhance habitat and provide improved hunting and fishing opportunities on the installation.



Invasive Species Control - Over the last 20 years, bush honeysuckle (*Lonicera spp.*) has steadily invaded the woodlands of eastern Kansas, including the southern 1/3 of Fort Riley. The Fort Riley Team researched various methods of control and established test plots.



As a result, an innovative wide-scale, precisely-timed, application of herbicide was developed and accomplished utilizing a rotary wing aircraft. Despite having a very small window available to achieve success, the application achieved over 95% control with no measured negative affects to native vegetation. A successive application produced similar results. Due to that success of the region's first aerial treatments for invasive bush honeysuckle, Fort Riley's expertise in this area is recognized at various levels, and has led to similar efforts throughout the states of Kansas, Missouri and Nebraska.



Program Management- Received the Director of Army Safety, Composite Risk Management Award for FY 2013.

Education - The Fort Riley Team provided mentoring and natural resources management training to nine Warrior Transition Battalion soldiers and two military dependent volunteers working through the Army Community Services Volunteer Program.



Other Natural Resources - The Fort Riley Team has successfully influenced the Kansas Legislature to promulgate a positive outcome for the installation. Working with the U.S. Army Regional Environmental Office, the Team effectively contributed to the passage of Kansas legislation directing local governmental agencies to collaborate with DoD activities prior to executing decisions that may negatively affect military training. Additionally, Kansas's hunter orange and hunter safety requirements that negatively affected Fort Riley hunters were updated.



Fish and Wildlife - The Fort Riley team was the Army pioneer for the iSportsman system that fully implement an online registration, check-in/out and deployment of the first true outdoor iSportsman Kiosk. Further refinements were initiated by the Fort Riley Team including user compliance agreements for installation specific regulations and web site data dissemination, customer feedback and acknowledgements. These features assist in ensuring that Fort Riley recreationist are aware of restricted areas, Fort Riley policy and other information that provide real time management of recreational use on a military installation.



This user-friendly system has already saved well over 1,000 man-hours of manual posting and data entry per year, and has now been implemented or planned at 17 DoD installations.



Fish and Wildlife - The Fort Riley Team continues to be a local and regional leader in conservation partnership efforts through creation of the *Wildcat Creek Conservation Partnership* with the U.S. Fish and Wildlife Service (USFWS), Natural Resources Conservation Service and the Riley County Conservation District along with the *Greater Prairie Chicken Partnership Coalition* with The Nature Con-

ued at well over \$50,000 annually at no cost to the Army. Additionally, KDWPPT agreed to become deed owner of an ACUB acquisition of a privately-owned land parcel that was land-locked by Fort Riley, helping to secure helicopter flight routes while preserving rare bottomland forest habitat along the Kansas River.



servancy, Ranchland Trust, Kansas Livestock Association and Kansas Land Trust. These collaborations resulted in seven stream improvement projects benefitting the federally endangered Topeka shiner, development of a 20,000 acre easement protecting core prairie chicken habitat and associated prairie maintenance projects.



Land Use Management - The Fort Riley Team hosted the Kansas Department of Wildlife, Parks & Tourism (KDWPPT) Region 2 and Senior Staff for their 2012 annual meeting, garnering positive influence and professional liaisons. Those interactions with Kansas officials have led to a number of positive results, including extended hunting seasons on Fort Riley for Soldiers who will miss some or all of the seasons due to deployment and the ability to acquire fish at no cost from the state. The latter example allows Fort Riley to discontinue charging a fishing permit fee to Soldiers and civilians while receiving fish for stocking val-

Fish and Wildlife - The USDA and the Fort Riley Team proactively initiated and completed a Wildlife Damage Assessment for Marshall Army Airfield to prepare for impending the Wildlife Airstrike Hazard assessment template guidance. The plan prompted several beneficial changes, including nuisance animal removal and innovative methods to reduce the chances of animal strikes and the potential aircraft damage and loss of life that could ensue.



Land Use Management - Utilizing our Agricultural Leasing Program, the Fort Riley team maintains perimeter firebreaks along the boundary of the installation, avoiding over \$200,000 in *annual* maintenance costs. The program also reduces a potentially life threatening fire hazard to our soldiers by timely removal of up to 90% of the hazardous fuels through the hay lease program and reduces



overall mowing costs in improved areas. Additionally, the recent fiscally constrained environment led to the development and successful implementation of a plan to provide the Commanding General's Mounted Color Guard its annual hay requirement at no cost.

Conclusion

Overall Program Management - The accomplishments of the Fort Riley Natural Resources Conservation Team have enhanced training, improved quality of life and minimized regulatory encroachment, resulting in a sustainable training environment. These accomplishments are just a few examples of a team dedicated to fully achieving the Army and DoD's vision, policies and goals.

That commitment to excellence was exemplified at 6:45 pm on June 15, 2013, as the Kansas City Symphony began its performance on Fort Riley's Main Post Artillery Parade field. The eighth annual Symphony in the Flint Hills took place within ear-shot of nearly fledged bald eagle chicks nested in a Sycamore tree



overlooking the Main Post Cemetery. High above the nest in a bluff overlooking it, a few enterprising members of the Fort Riley Natural Resources Team had applied their time and talents to create a first class viewing stand out of a repurposed deck from a relocatable building, allowing numerous Soldiers and civilians to watch the nest from incubation to fledging.

During the day-long Symphony festival, many visitors were able to enjoy the newly constructed Kansas River Access Point that was developed through a cooperative effort between the Fort Riley Team and state of Kansas that was recently added to the National Parks Service River Trails System.

Visitors seized the opportunity for an interpretive walk along the nature trail behind the First Territorial Capitol Building throughout the day and described it as one of the highlights of the

event. Such an opportunity was made possible by a few members of the team that took the time to apply for a National Public Lands Day grant, collaborated with an Eagle Scout Candidate and followed the project to fruition.

Near the end of the Symphony, at least six species of bats emerged from many of the 75 constructed bat houses and developed roosting areas placed around the Main Post Historic District, some of which were creatively attached to the soffits of the 279 historic buildings in cooperation with Kansas's State Historic Preservation Office.



With an ensemble of professional biologists that are highly motivated from doing the little things right to effectively working on a regional scale, the Fort Riley Team is at the forefront in meeting the challenges to produce results that have lasting positive affects for the Army and DoD.

Fort Riley Natural Resources Conservation Team

Jeff Williamson, *Director of Public Works*
 Herb Abel, *Environmental Division Chief*
 Alan Hynek, *Conservation Branch Chief*
 Shawn Stratton, *Supervisory Wildlife Biologist*
 John Barbur, *Management Agronomist*
 Jeff Keating, *ACUB Program Manager*
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 Mark Neely, *Wildland Fire Program Manager*
 Tom Duckworth, *Wildlife Biologist*
 Mike Houck, *Endangered Species Coordinator*
 Steve Wahle, *Biological Technician*
 Josh Pease, *Biological Technician*
 Brett Parsons, *Biological Technician*
 Frank Rottinghaus, *Biological Technician*
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 Pat Beavers, *Pest Controller*
 Mark Schreefer, *Pest Controller*
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